ARCHITECTURE

VOL. XXII. NOVEMBER 15, 1910. NO. 5

ARCHITECTURE, conducted by a Board of Architects in the interests of the profession, is published the fifteenth of every month by FORBES & COMPANY, LTD., A. H. Forbes, Prest.), 527 Fifth Avenue, New York. Its opinions on technical subjects are either prepared or revised by specialists.

PRICE, mailed flat to any address in the United States, Mexico or Cuba, $5.00 per annum, in advance; to Canada, $6.00 per annum; to any foreign address, $7.00 per annum.

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ENTERED at the New York Post Office as second-class mail matter.

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ARCHITECTURAL CRITICISM.

NO architect can seriously deny the importance and beauty of the French style, but the extravagant and almost violent manner in which it has been both used and advocated by its exponents has caused it to be regarded with something of disfavor by our more conservative architects. As it is usually the younger men who are most enthusiastic about the style they consider the best, the most contemptuous regarding all other, and whose design invariably runs to extremes, it would be well if a photograph of the Institute of Musical Arts (Plate CIII) could be placed on the walls of each of the ateliers in which the French style alone is seriously considered, as an example of how it should be employed. It is after all upon the simple and naked mass that the main reliance must be placed, and in this building by the spacing of the windows, the excellent disposition of the plain surfaces, and the correct sub-division of the mass, there has been attained a result, which decorated in no matter what style, would still be most excellent. The ornament has been completely subordinated; and though exceedingly low in relief it emphasizes the points to which attention is desired in the most delightful and natural manner; moreover each individual piece of decoration is in itself most charming. When upon close examination we find that all the windows are of substantially the same area (as is essential in a school building where all rooms should be equally well lighted) it is at once recognized that the problem was by no means as easy as it would appear from its perfect solution. Four tiers of openings of practically the same dimensions are not the easiest things in the world to merge into a unit, and the slight differences in their treatment in this case would on paper hardly be considered sufficient to overcome this difficulty, but a glance at the photograph gives ample proof of the success of the method adopted. On one further thing Mr. Barber is to be congratulated and that is that he has gotten along without an order. We have had banks with orders, stations with them, schools with them, in fact, there has been no class of building in which their use has been thought unnecessary; and here is a most beautiful building without a trace of them. They have been the first lesson of the schoolboy and the last resource of the practitioner, and so universal has been their use that while recognizing the splendid decorative effect which is inherent in the order, it is indeed an agreeable surprise to find an architect who can do without their first aid application.

THERE has been occasion before in this column to speak with pleasure of the increasing excellence of modern commercial design, especially in its use as brick work, due in part to the employment of a better class of architects to design the work, and in part to the increased knowledge of the architects themselves.

The Harperley Hall apartment house (Plates CV, CVI and CVII), is, I believe, in some respects the best which has been published. There has been no money wasted in foolish or unmeaning ornament; every line has some distinct purpose and the decoration has been naturally evolved from the structure; the materials themselves have been made, without any veneer of surface treatment, to form a part of the decoration. This can be very clearly seen in the photograph showing the detail of the crowning motive of the building, where the fireproofing around the steel work is by its arrangement in pattern and in the treatment of its surfaces made a complete satisfying wall treatment. The cornice is strongly reminiscent of structural forms; and as it is from structural forms that the most successful ornament has been evolved, it seems peculiarly appropriate to a modern steel building to have the cornice constructed in this manner. I dare say its form was originally suggested to Mr. Wilkinson by one of the hanging scaffolds now in common use in tall buildings; doubtless many of the architects will recall the Metropolitan Tower in certain stages of its construction when, crowned only by one of these scaffolds, its appearance was even more satisfactory than with the present masonry cornice. In Harperley Hall this modern element has no intrusive quality; it fulfills its purpose without being insistent and forms the most vital note of a correct and modern composition.

If an adverse criticism can be made to any portion of the building it is probably to the cornice at the top, which to my thinking is a trifle ragged to surmount so simple a surface treatment; slightly smaller modillion would have better answered the purpose; but with the exception of this insignificant details there seems to be nothing left to be desired.

THE extraordinary latitude existing in modern architecture is evident by a comparison of the Flatbush Congregational Church (Plates XCIX, C, CI), and the meeting house for the Ethical Culture Society (Plate CIV) the purposes of which are substantially the same; one thoroughly scholastic, developed completely from precedent and holding very close to a historical style; the other so far from precedent that it might be autocthonic in a people without knowledge of classic tradition. Nor do I mean to convey anything of disparagement to either structure; while they are at the extremes, each is of a very high merit and most singularly each seems appropriate to its use. One could hardly imagine an assembly of a Congregational Church being held in the Ethical Culture Society building; that belief has behind it too much of tradition and of an ordered and tranquil past. Not less inappropriate would be the Flatbush building for the Ethical Culture Society; an outgrowth of a spiritual necessity unsatisfied by any traditional faith; therefore fitly housed in a building of no traditional school. It is the source of wonder to me also that the architects should have been so well selected to produce the admirable results, both from the standpoint of design, and of fitness to purpose, of these buildings. It is a matter of common knowledge that no kind of business has employed methods for the selection of architects so ludicrous as have our churches. Very important church buildings have been given to architects, absolutely unfitted for their design, because of personal friendship with some one of the trustees or because of church membership of the architect employed; and while the method of selection of an architect in all forms of business is chiefly remarkable by its absence, the churches as a whole have made the poorest selection; and that church architecture in the United States has reached even its present rather low level is due more to the strength of an excellent tradition than to the ability of the designers. Therefore, I cannot believe that to any other factor than chance is due the very fortunate selection of Messrs. Allen, Collens and Jallade for the one building and Mr. Kohn for the other, but the success of this selection resulted largely from a factor not generally considered as an important one; I mean the influence of racial descent upon the character of an architect's design. It is generally supposed, and I think incorrectly, that style is determined largely by training; certainly these two buildings will go far to disprove this theory. Their authors had a substantially similar education, both Mr. Collens and Mr. Kohn were, I am told, pupils of the Ecole des Beaux Arts, and the contrast between their methods of design is no less marked in their other work than in these two buildings, although less evident because of the divergence of the classes of buildings in other cases. Messrs. Allen and Collens are of English descent with several generations of New England forebears, and their work shows the distinctive characteristics of their race, simplicity, restraint, and above all good taste—a sort of artistic tactfulness—while that of Mr. Kohn is filled with the passionate and mystic imagination of the Hebrew. A direct comparison between the methods of design of the buildings themselves is impossible, they are too individual for this to be made, but radical as these differences are both have the qualities of strong and enduring design worked out honestly and with sincerity; the one in close accordance with the traditions of the English school and the other in the daring methods of Art Nouveau. It may also be remarked that the tower of the Flatbush church and of the Danbury church, designed by Howells & Stokes, will rank very high in the examples of that most difficult problem, the treatment of a tower with orders. On the other hand the Ethical Culture Society's building is certainly quite the best piece of Art Nouveau architecture yet designed in this country, and compares well with the magnificent German department store buildings whose excellence is so great as to almost promise a future for this style. Take these two buildings, either together or separately, each is of its kind remarkable, and paradoxical as it may seem their very differences serve to fit them for similar purposes; and it has rarely happened that in the same issue of an architectural magazine there have been published different buildings which give so much food for thought.

THE Thomson Meter Company Building (Plate CVIII) is published because we feel that it is of interest on account of the peculiar design and construction. The owners of the building were desirous of having a fireproof building which would have the maximum amount of light in every part of the building and did not want beams or heavy columns on the front as all their work benches were to be lined up against the windows. This and the nature of the ground, which is of good clean sand and gravel, decided the type of construction in the author's mind. A reinforced concrete building was planned for the reason that the columns on the exterior could be exposed and the extra covering ordinarily required around a steel or cast-iron column (which greatly increases its original size) could be eliminated, also that in the construction of the building some of the sand and gravel from the excavation could be used in the concrete.

The most important question in the building then arose and that was the method of fastening the shafting, motors and other machinery to the ceiling, which, up to present time in a reinforced concrete building has been very difficult and almost impracticable.

In considering this later phase it was found that all beams and girders or all column spans would have to be alike so that a piece of machinery in one part of the shop could be carried into another part of the shop without changing any hangers. It was finally decided to do this and to make each concrete beam in the form of an exaggerated I beam, that is, with groove on each side and in this groove was to be later fastened the hanger. Each beam had on each side a groove similar to every other beam. This allowed the shafting to be adjusted within one-hundreth part of an inch in truing up.

The steam pipes and electrical conduits, which are generally hung below a beam in a building of this type and are an impediment in moving around the shafting and belting, were finally placed against the under side of the floor slab by means of leaving holes close against the slab in each beam. Later on the conduits and steam pipes were passed through these holes and therefore lie against the under side of the floor slab and out of the way of the shafting.

In each column in the mold was left a piece of timber oiled so that it would not swell and later leave the concrete, this piece of timber being wedge shaped, like the bevelled sleeper in a floor. This piece of wood ran from floor to ceiling and was used for the fastening of the work benches and other things, so that since the completion of the building up to date, not a solitary hole has been bored in the concrete for the purpose of any piping, belting, shafting or anything else.

Pivoted windows were used to give the maximum amount of ventilation, and while opened, to prevent the rain from falling on the work benches against the windows.

In the decoration of this building the author felt that the only way to treat it was to be very frank in this construction, expose it on the exterior and not attempt to face the cement with any material whatsoever. Under the cornice polychrome terra cotta was used merely to give color to the building, which otherwise would have been monotonous. Bricks were used in the window panels. Upon completion the entire exterior of the building was given a brush coat of white cement and yellow sand.

In the actual construction of this building the foundations were started November 1 and the building was completed April 1, so that during the entire winter, which was rather a severe one (winter of 1909) the construction was carried right on. In mixing the cement, hot water was used so as to insure a quick set before nightfall and at night the fresh work was covered. Salamanders were kept going all night and during the day in the interior of the building except in several places and that was, where through carelessness, one of the principal columns in the interior, a girder and several beams had been frozen. This was at the first floor. This frozen concrete work was kept frozen purposely until the building was enclosed so as not to get a mechanical action in the setting of the cement. Upon removal of the molds, this column, girders and beams were tested to four times the actual load and were found to be perfect. There was no deflection and no settling.

The plant produces its own steam and current for lighting and power, and carries no insurance.

A CONTRAST BETWEEN TWO COMPETITIONS IN THE SOUTH.

A STRIKING contrast is afforded by two architectural competitions now in progress in southern cities.

At Richmond, Va., the Confederate Memorial Association is about to choose an architect for a building which will contain a stately hall of assembly and will house its collections of objects of interest of the period of the Civil War. The association, although it retained experts for the preparation of the program and to conduct the competition, issued the program before asking its approval by the American Institute of Architects. Since the program failed in several respects to conform to the provisions of its Code of Competitions, the Institute was unable to give the desired approval.

Upon these facts being presented to the professional advisers and by them to the executive committee of the association, announcement was made that a revised program in harmony with the principles approved by the Institute would be issued. As revised, the program is admirable in so many ways that a brief resumé of it will be of interest to architects.

The program constitutes an agreement between the association and the competitors guaranteeing that one of them will be employed as the architect for the building under the terms of the Institute schedule of charges. It provides a proper basis of settlement in case of the architect's dismissal or the abandonment of the work. It provides suitable prizes for the authors of the four designs adjudged next in merit after that of the winner.

It provides that architects desiring to participate in the competition must submit drawings and photographs of work executed by them and that only those who thus demonstrate their capacity properly to carry out the work shall be admitted to the competition.

Provision is also made for submission of the designs to a jury of three consisting of the president of the association, one of the professional advisers and another architect to be named by the president of the American Institute of Architects. In the light of the findings of this jury, the executive committee will make the final decision.

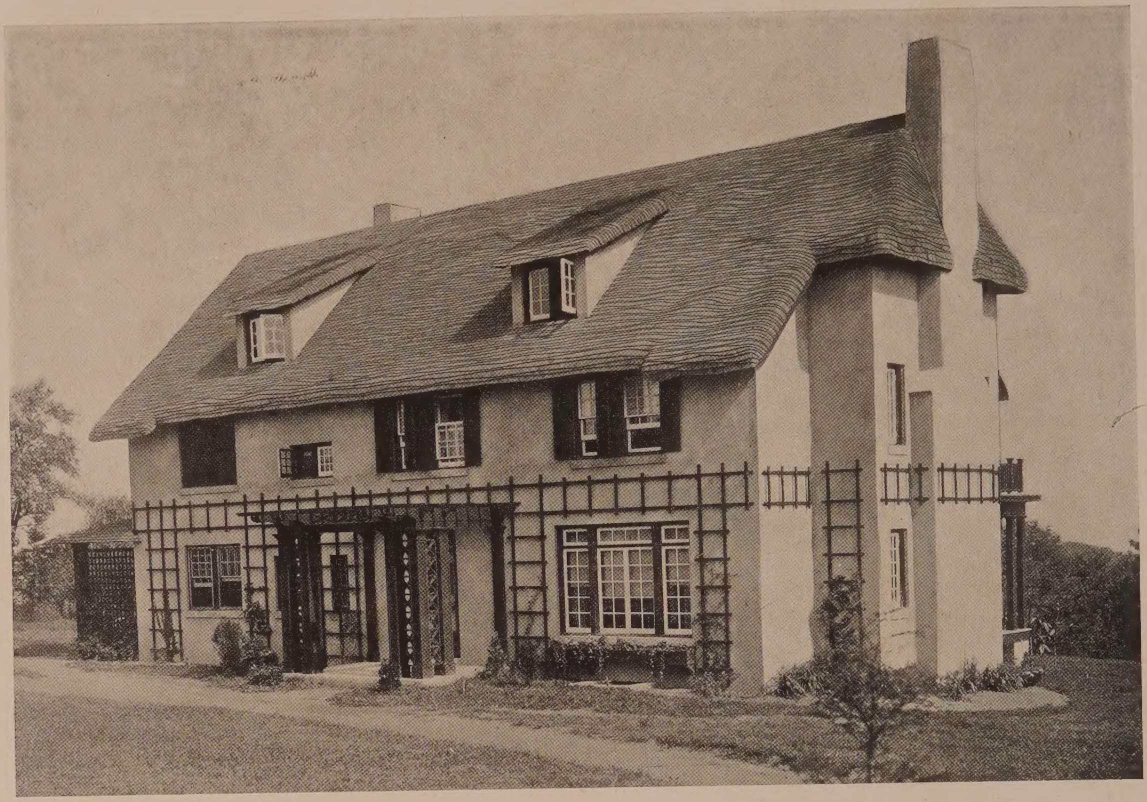
The drawings, while they are adequate to present the design, are few and at a reasonably small scale. An interesting and admirable feature of the program lies in the fact that the utmost latitude of solution is allowed the competitors and that the statement of requirements is as far removed from that tormenting precision and over elaboration so frequent in programs as can well be imagined. The competitors are not called upon to make any statement as to the cost of the building but its cubage is carefully limited. The problem itself is a highly interesting one and architects who are interested in the competition may obtain copies of the program from Mr. J. Taylor Ellyson, Richmond, Va.

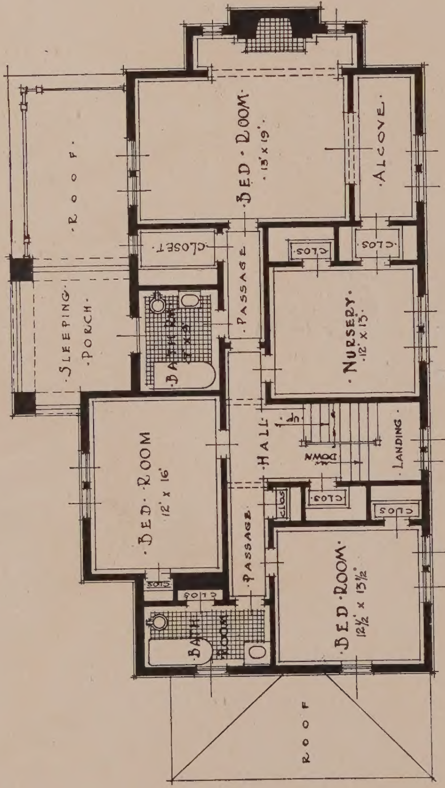
At Chattanooga, Tenn., a County Court House is about to be erected at a cost of $30,000. As a proof of the program failed to conform to the principles approved by the Institute, the attention of the Building Committee was called to the Institute's "Circular of Advice" and the employment of an expert adviser was urged. After a lapse of several weeks, the program was issued without substantial amendment.

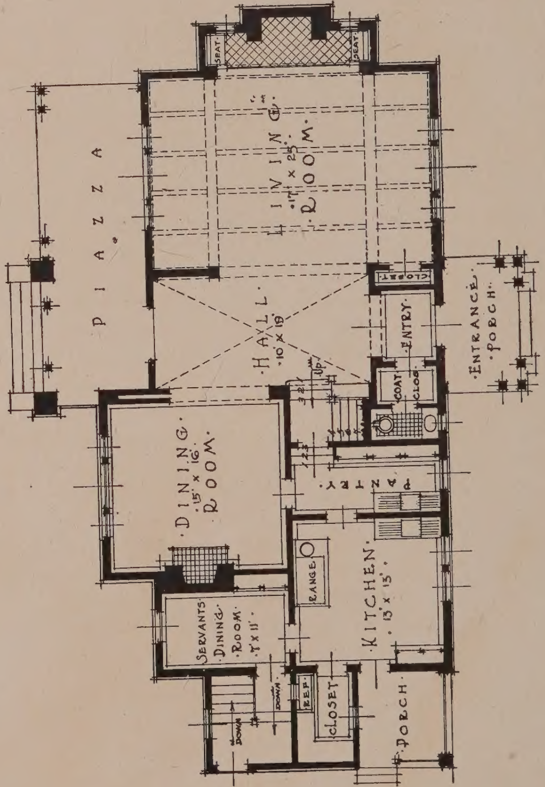
The program fails to state that any expert has been employed and in fact gives every evidence that none has been. It distinctly states that "the successful competitor will be employed by the Building committee as architect for the building" but this is nullified in the same sentence by the provision that "the Building Committee reserves the right to reject any and all plans without expense to the county."

Should an architect be secured by means of the competition, he will be paid three per cent on the cost of the building for plans, specifications, detail drawings and a

(Continued page 169)







COTTAGE AND PLANS, H. M. TURNER, CHAPPAQUA, N. Y.

Alfred Busselle, Architect.

(*Continued from page 167*)

general interpretation of them, but the committee reserves the right to employ whomsoever it pleases to supervise the construction of the work. If, after appointing an architect, they do not think him competent, he must associate with himself some architect satisfactory to the building committee and pay that architect for his services.

Should the committee desire the architect to superintend construction, he must so act for a fee of two per cent and should he fail or refuse to so act and the county be damaged thereby, a sufficient amount of his fees shall be held to cover the damages.

The program includes an ingenious scheme whereby the "successful architect shall give a good and sufficient bond in the sum of $10,000 for the purpose of protecting and saving harmless the county by reason of any or all mistakes in or about his plans, drawings and specifications" and in order to determine whether he has made any mistakes in his plans, an elaborate scheme of selecting arbitrators, one by the architect, one by the building committee, one by the judge of the Circuit Court of Hamilton county is announced, their procedure is described and the costs of the arbitration is divided between the county and the architect.

A lengthy and detailed statement of the accommodation required in the building is given but the building committee with singular modesty and caution state that neither they nor the county will assume any liability for these statements.

All this seems to have been too bitter a pill for even the kind of architects willing to take part in such a competition and in a supplement to the program the committee withdraws so much of it as relates to the giving of a bond and states that an architect will be employed as professional adviser in the conduct of the competition. His employment seems a trifle late for any usefulness on his part. It is indeed a cause of wonder how any architect could be found willing to act as adviser after the issuance of such a program.

The program was not in all respects a bad one. Had the building committee adopted the Institute's suggestion of appointing an expert *before* the issuance of the program instead of afterwards, had they then eliminated the bond instead of afterwards, and had they made a few more changes which they might wisely have made, they would have brought their program into harmony with the principles approved by the Institute and would have opened their competition to the great body of able, competent and honest practitioners of whose services they have now deprived themselves.

The futility of an attempt in the part of an inexperienced and uninstructed committee to pass without expert guidance through the intricate mazes of a public competition is thus again demonstrated.

THE FORTY-FOURTH ANNUAL CONVENTION A. I. A.

THE American Institute of Architects will hold its next convention in San Francisco, Cal., January 17, 18 and 19, 1911. The board of directors will hold its meeting prior to the convention on Monday the 16th of January.

After the president has delivered his annual address the reports of committees will be received. To obtain prompt action and discussion the board has ruled that all reports must be in the hands of the secretary one month before the convention, so that the committees appointed by the president may consider such reports and present their conclusions and resolutions following the reading of the report. Discussion on these reports will probably follow.

In addition to the routine business of the Institute, the subject of interest before the convention will be the architecture of the Pacific coast, on which the following papers are expected: The Development of Architecture on the Pacific Coast and the Rehabilitation of the City of San Francisco: the Aesthetic Problems of and what the Coast has Accomplished in City Planning, by members of the committee of the San Francisco Chapter, of which Mr. J. G. Howard is the chairman. Mr. Charles H. Bebb of Seattle will deliver a paper on The Salient Points of the Architecture of the Northern Pacific Coast, while Mr. A. B. Benton of Los Angeles will present a paper on the History and the Present Status of the California Missions.

THE MANUFACTURE AND USE OF WALL TILE.

CHARLES F. BINNS.

BURNED clay as a building material has arrived. From the opening of the Christian era it has been known and used, but during long centuries it survived merely in the barest structure. Some exceptions there were in both exterior and interior work but in the main clay wares remained comparatively uninteresting and badly utilitarian. The nineteenth century saw a great advance and the twentieth bids fair to reach the consummation.

Terra cotta in the outer wall, as structure and decoration in one, leads logically to tile for the interior. All that can be said in favor of brick or terra cotta construction may also be said for tile as a finish. Fireproof, sanitary, interesting and expressive, there is no other material which can be compared to glazed tile.

Wall tile are made of a pottery clay not unlike that used for white ware dishes. No clay exists in the storehouse of nature which will, unaided, develop into a desirable white ware. The mix, technically known as the "body" is composed of several ingredients to each of which belongs a special function. In the nature of the case a body must be plastic and this property is supplied by the different clays which are known under certain trade names. But these clays, if used alone, would remain open and porous after being burned or would warp and twist out of all recognition. To the clay, therefore, there is added a sufficiency of ground quartz or flint stone or, perhaps, a proportion of ground pottery made from defective pieces. This non-plastic material has the effect of opening the pores of the clay so that it becomes possible to maintain a sufficient accuracy of line and surface during the operations of drying and burning. Even yet, however, the mixture is incomplete. If only clay and quartz were used the body of the ware would be soft even after burning and would inevitably crumble with even moderate usage. A substance is called for which will flow under the action of the fire and impart to the mixture a partial vitrification which results in density. This requirement is met by the mineral feldspar which contains some seventeen per cent of potash. At a sufficient heat the mineral will melt to an almost clear glass so that when pulverized and added to the mixture it acts as a cement under the fire of the kiln and enables the tile maker to secure a body as dense as he may require.

The proportions of the mix being decided by experi-

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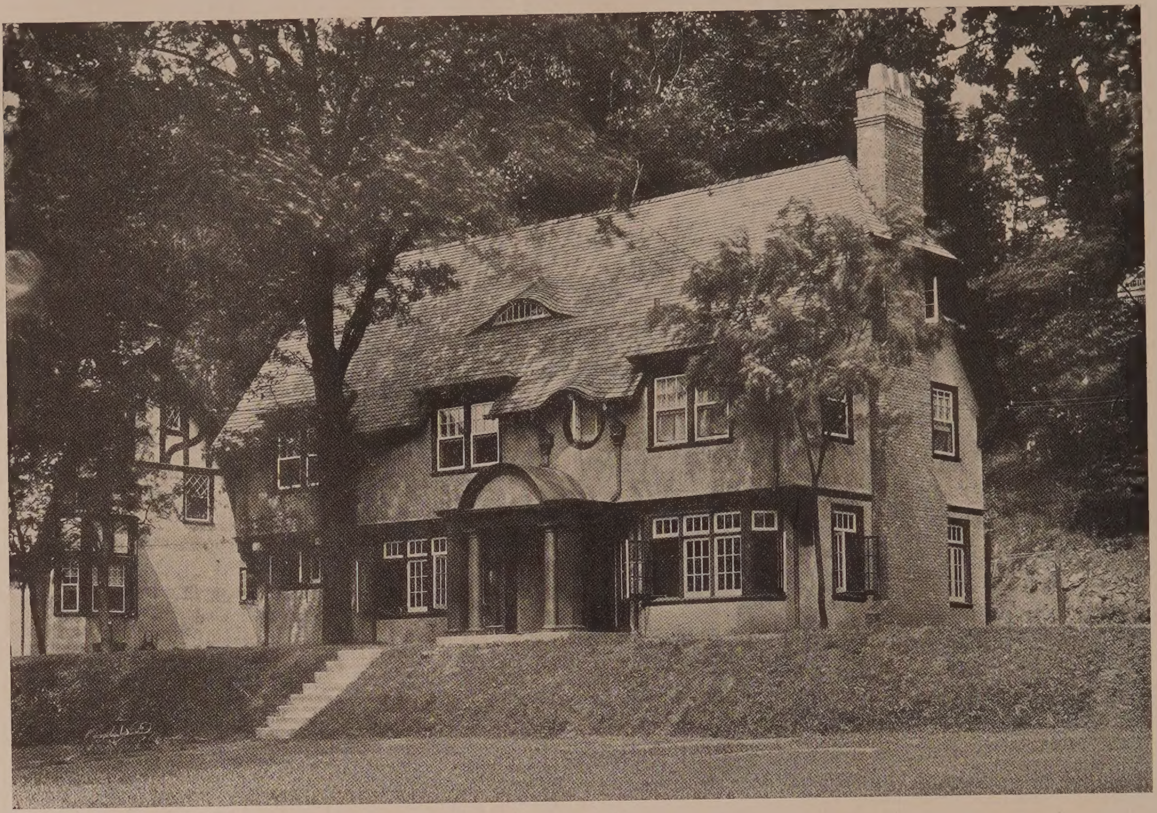
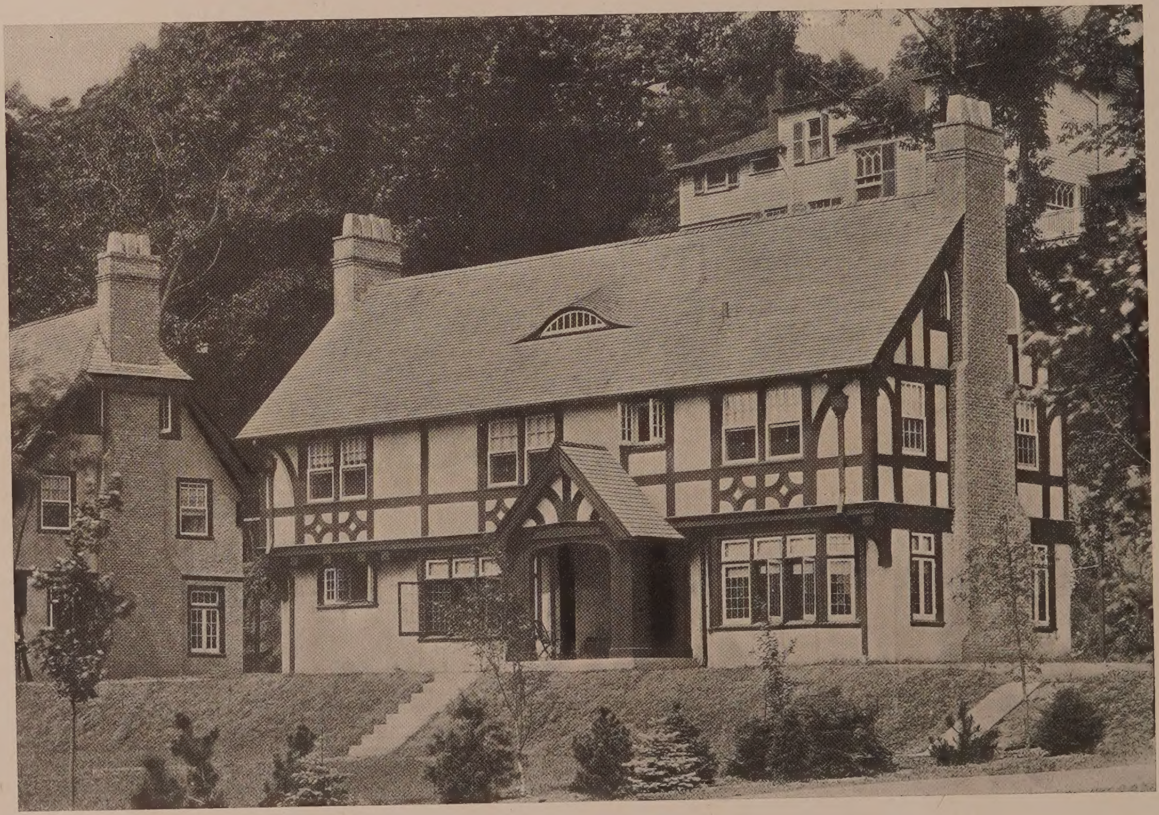
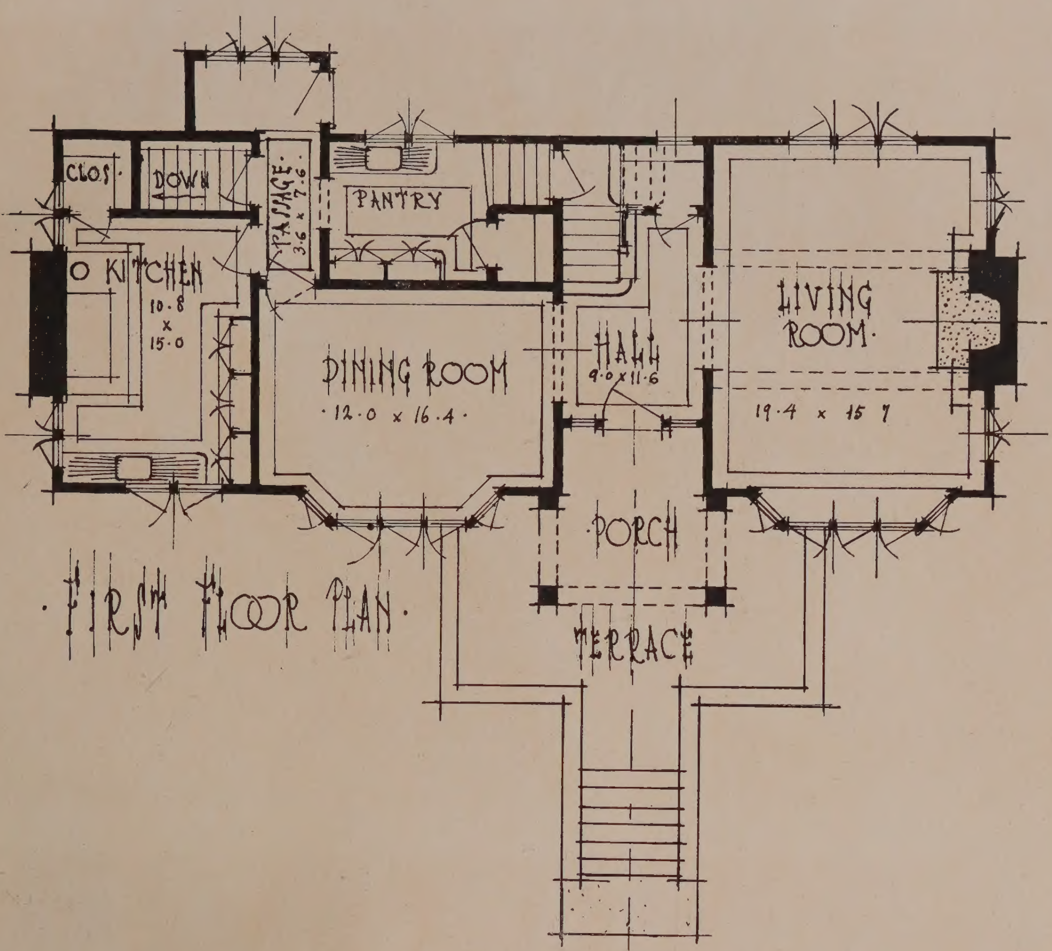
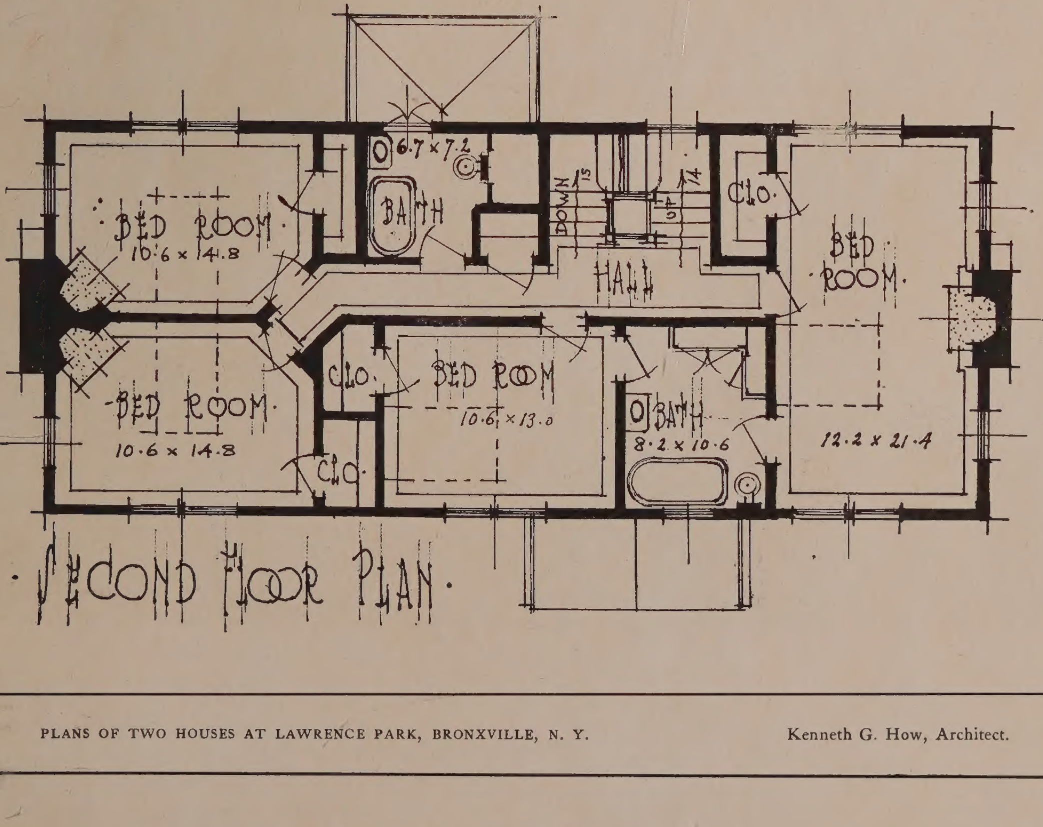


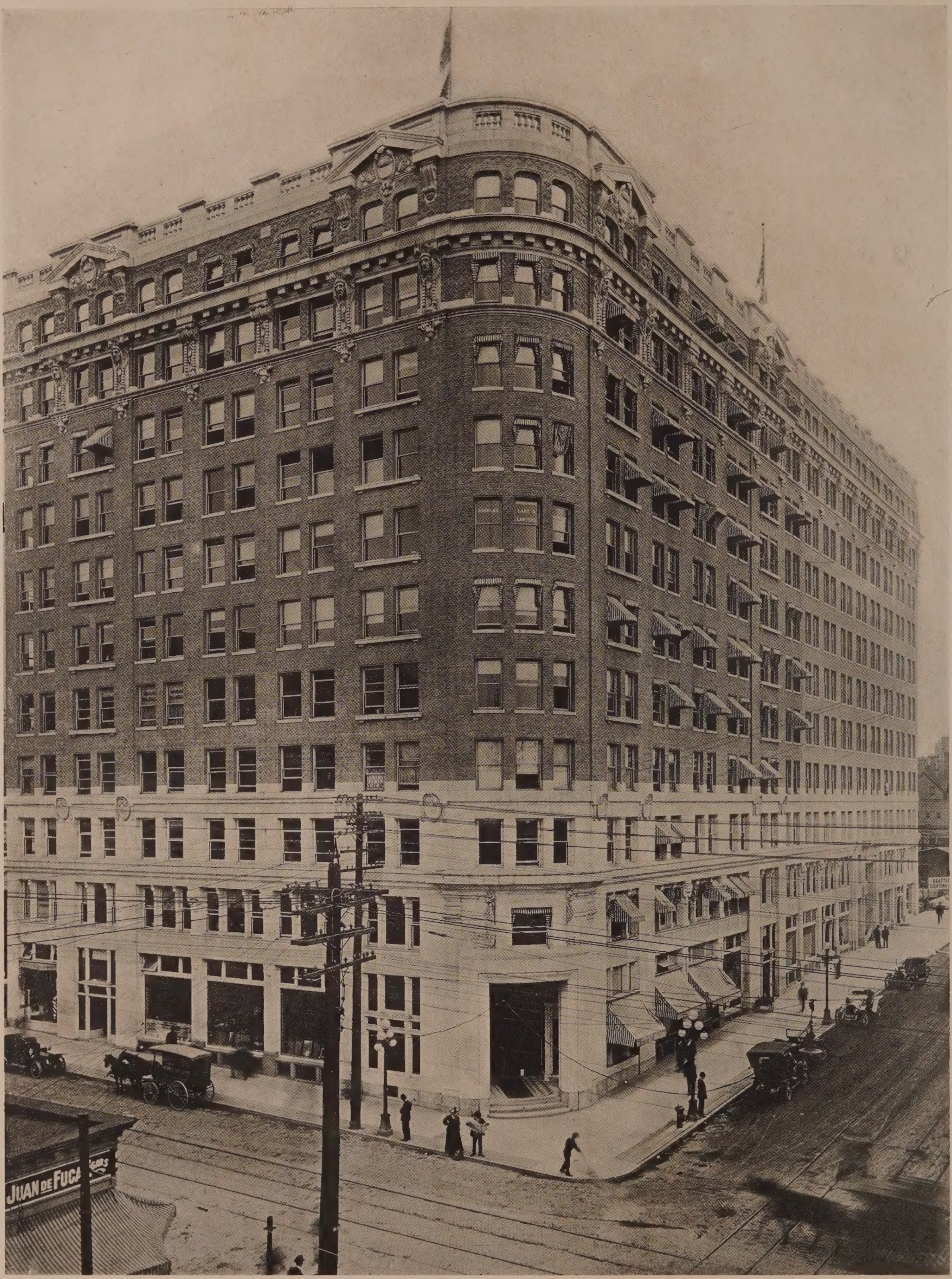


TWO HOUSES AT LAWRENCE PARK, BRONXVILLE, N. Y., FROM SAME PLAN. (See opposite page). Kenneth G. How, Architect.





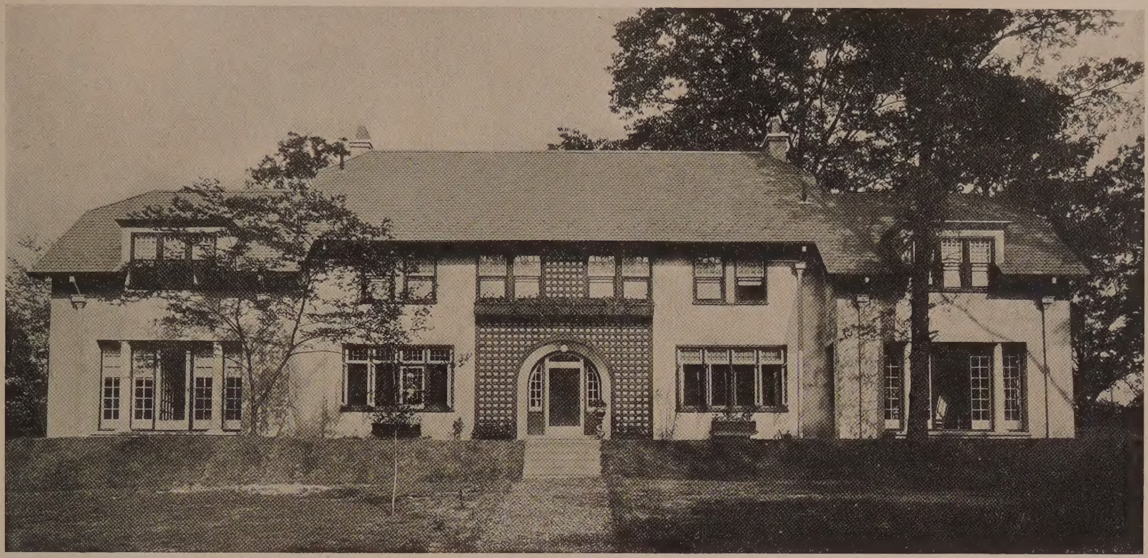
PLANS OF TWO HOUSES AT LAWRENCE PARK, BRONXVILLE, N. Y. Kenneth G. How, Architect.

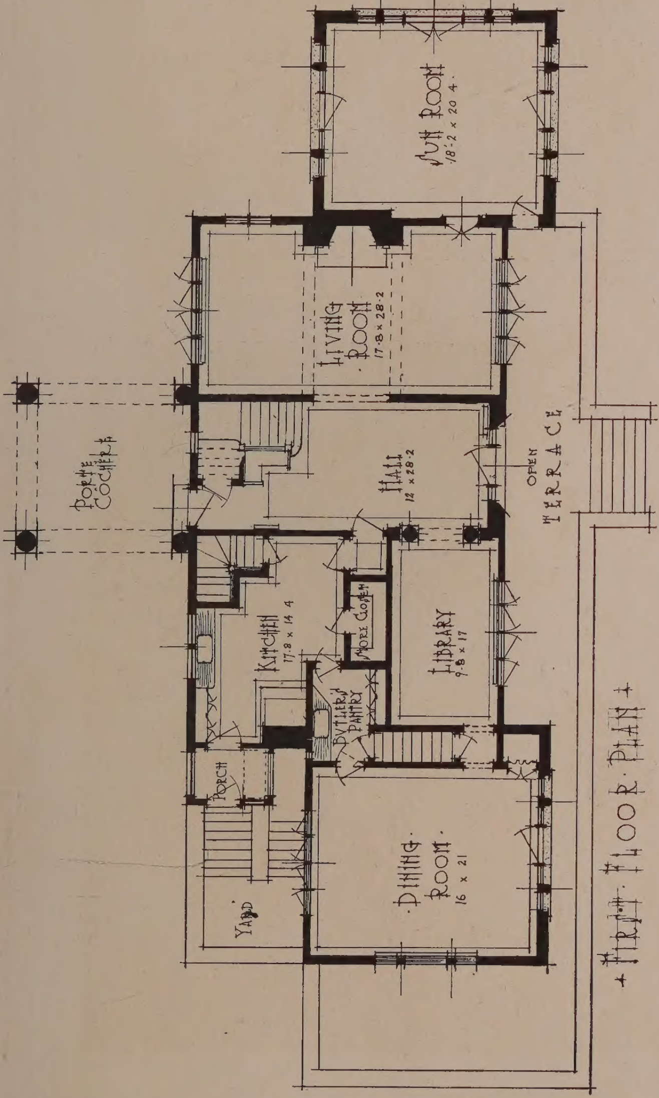


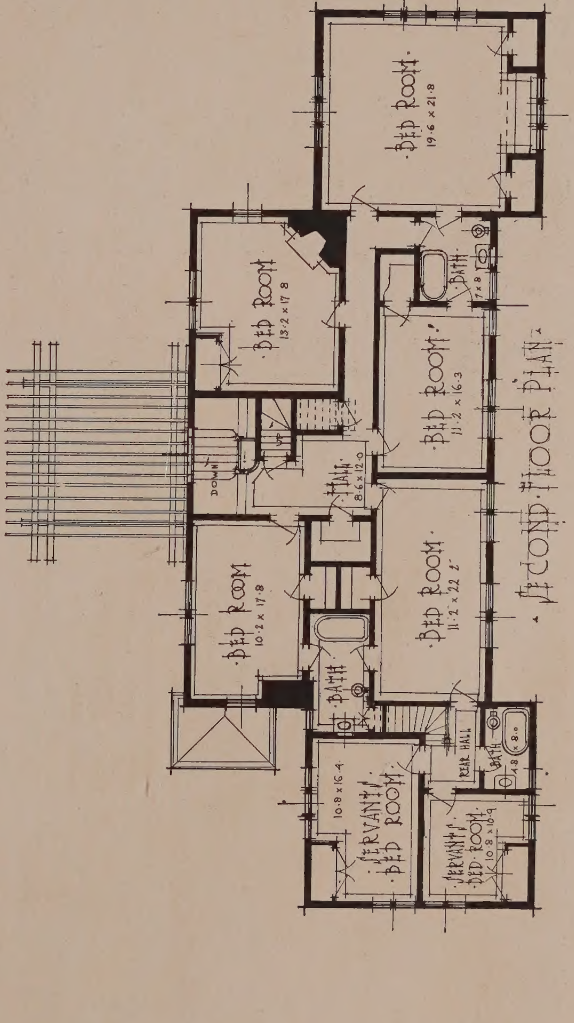
WHITE BUILDING, SEATTLE, WASH.

Kinnear Pressed Radiators.

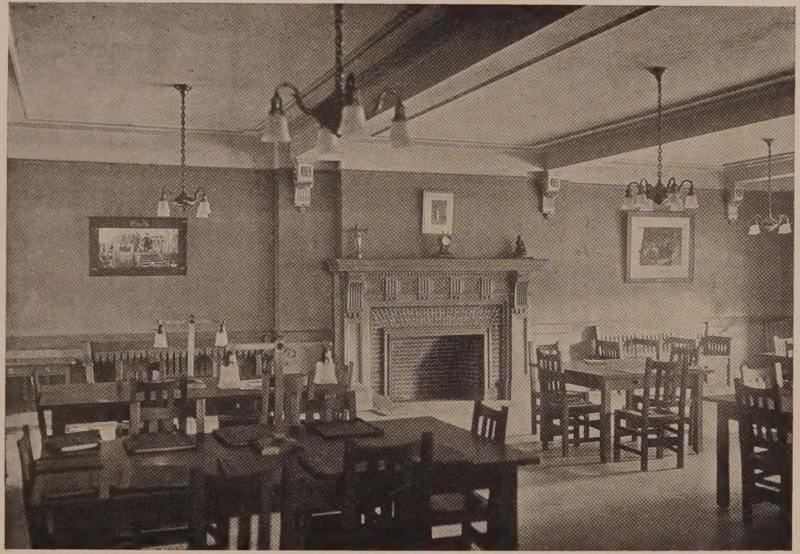
Howells & Stokes, Architects.



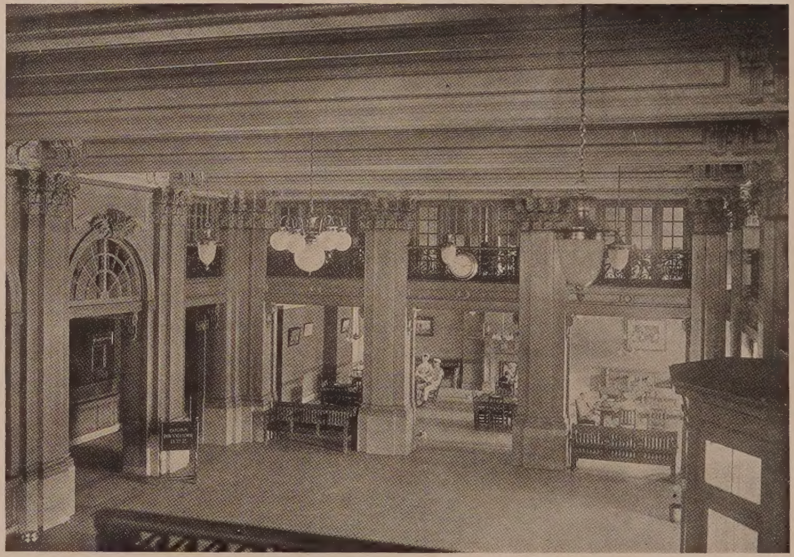




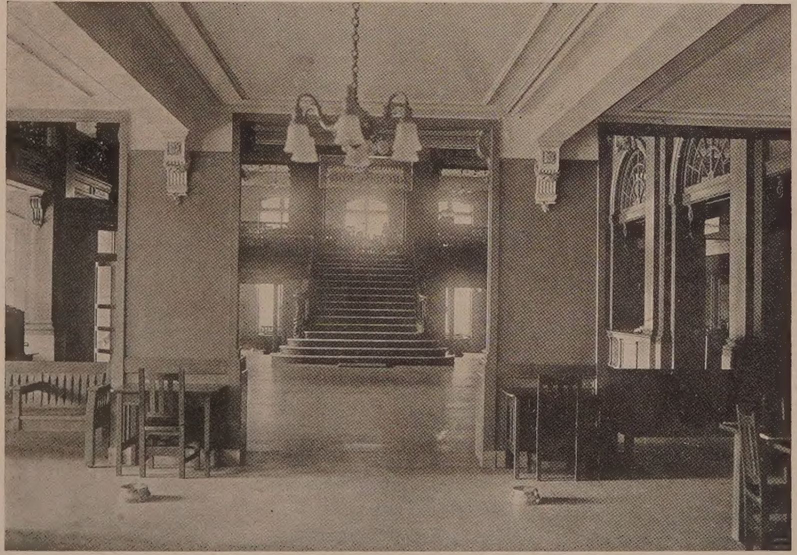
HOUSE AT LAWRENCE PARK, BRONXVILLE, N. Y. Wm. A. Bates, Architect.



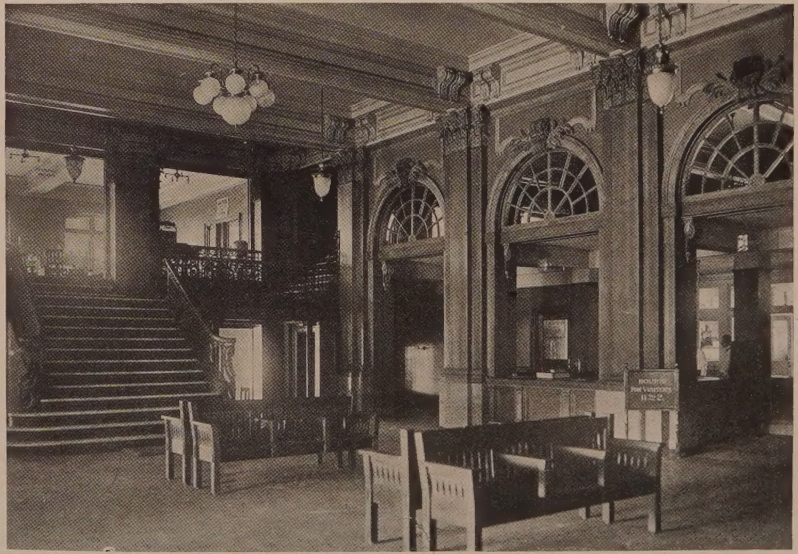
Reading and Writing Room.



Lobby, looking toward Reading Room.



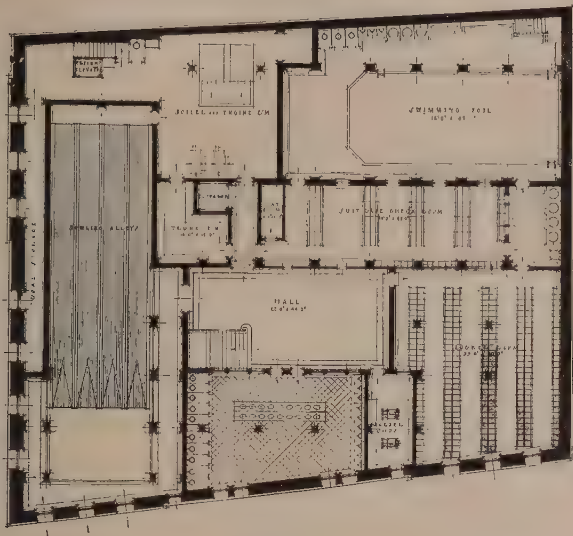
Lobby, from Reading Room.



Lobby, looking toward Office.

INTERIORS, NORFOLK NAVAL Y. M. C. A., NORFOLK, VA.

L. E. Jallade, Architect.



·BASEMENT PLAN·
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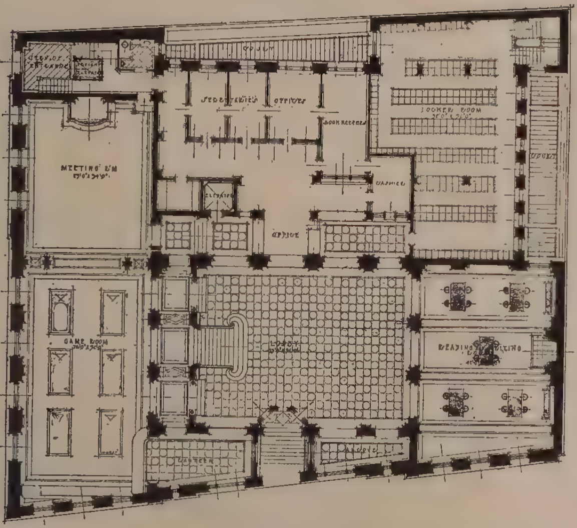

·FIRST FLOOR PLAN·
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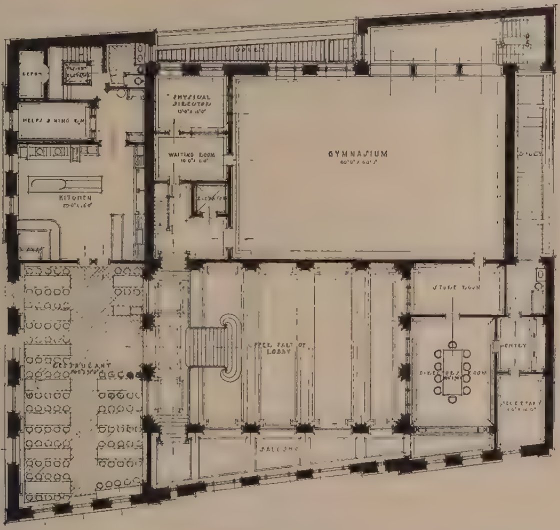
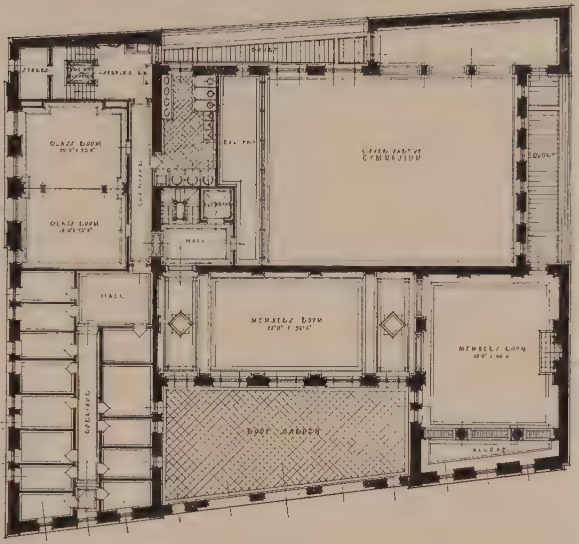
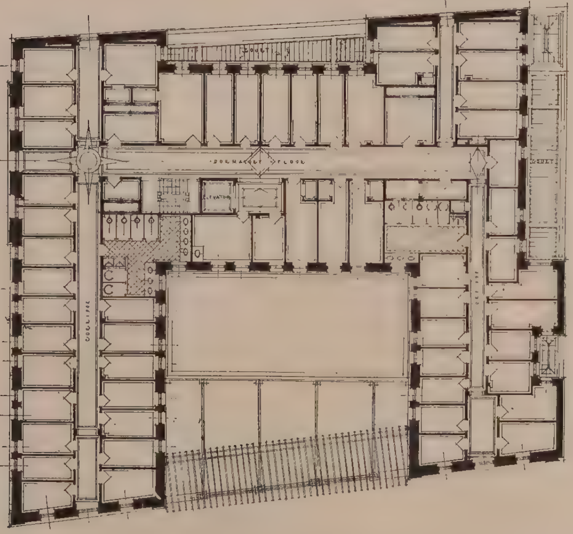


·MEZZANINE FLOOR PLAN·
·SCALE ⅛ INCH EQUALS 1 FOOT·



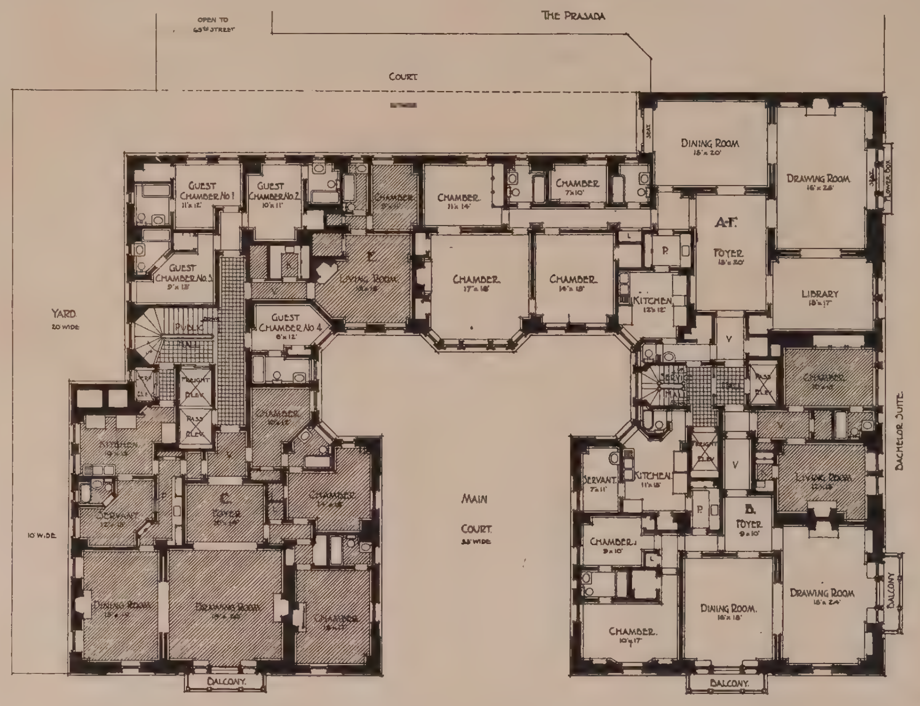
·SECOND FLOOR PLAN·
·SCALE ⅛ INCH EQUALS 1 FOOT·



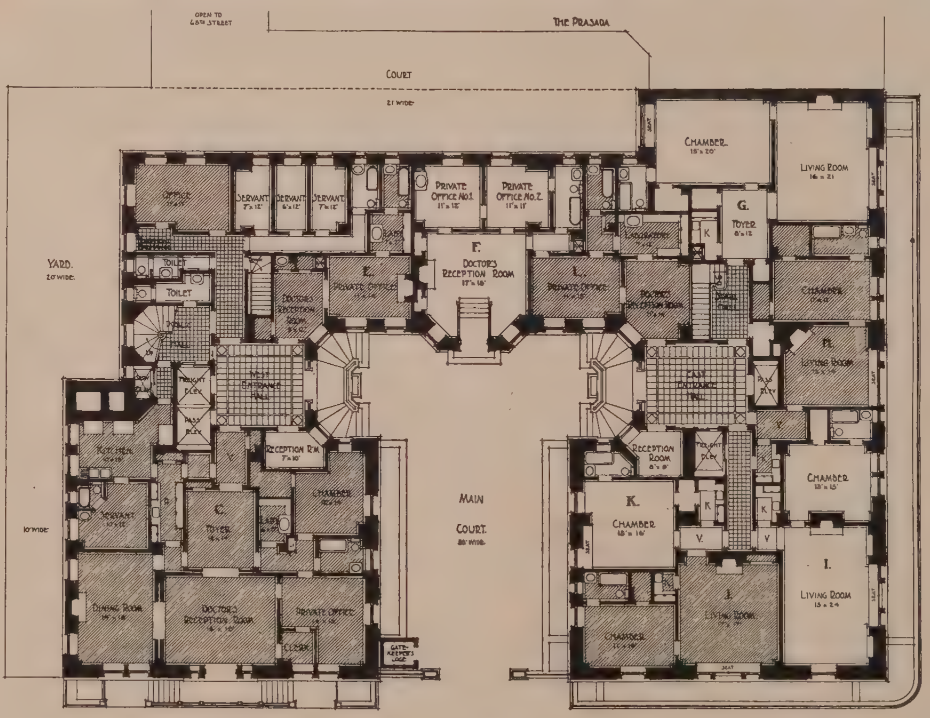
·TYPICAL FLOOR PLAN·
·SCALE ⅛ INCH EQUALS 1 FOOT·

PLANS, NORFOLK NAVAL Y. M. C. A., NORFOLK, VA.

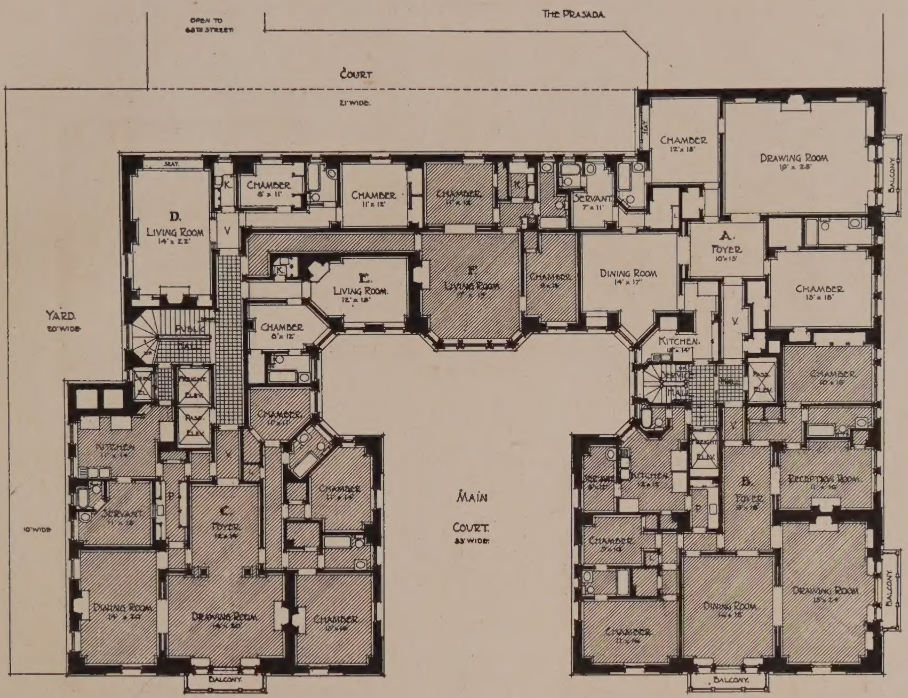
L. E. Jallade, Architect



PLAN OF TYPICAL APARTMENTS.
HARRERLEY HALL.
CENTRAL PARK WEST & 64TH STREET



PLAN OF FIRST FLOOR.
HARPERLEY HALL.
CENTRAL PARK WEST & 64TH STREET.



PLAN OF TYPICAL APARTMENTS
HARPERLEY HALL.
CENTRAL PARK WEST & 64TH STREET

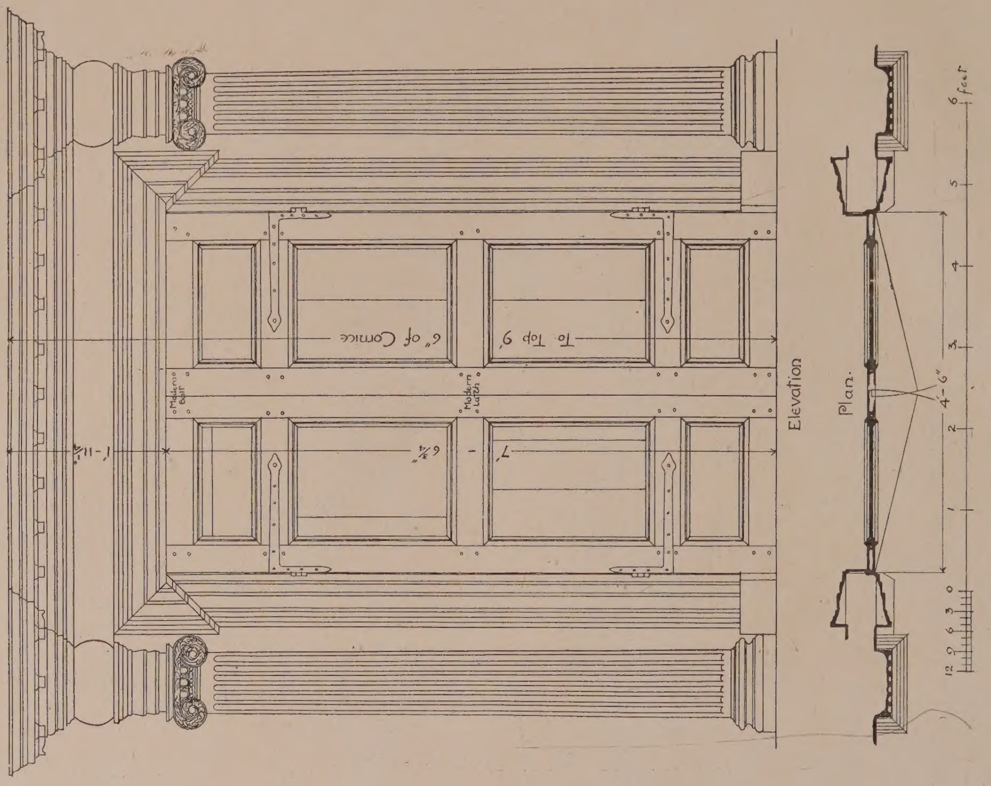
(Continued from page 169)

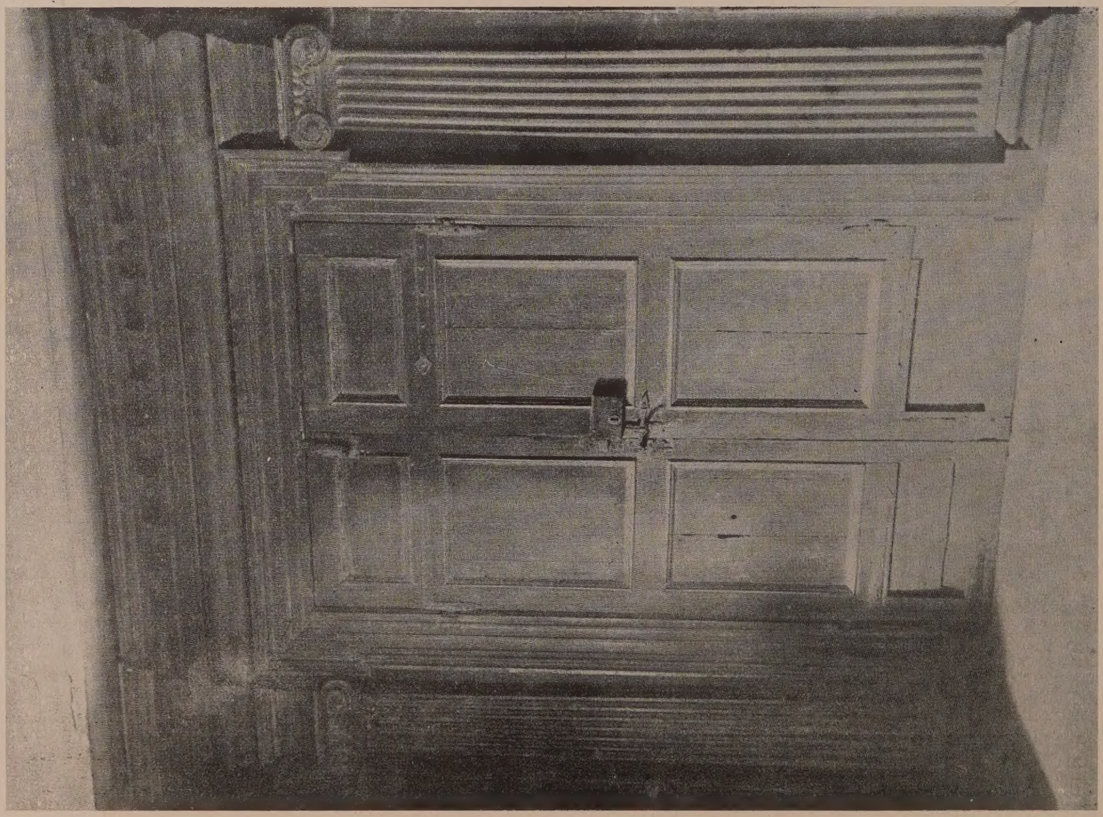
ment the respective amount of each ingredient is weighed out carefully and the whole is agitated with enough water to produce a thin cream which is technically known as "slip". This is now strained through a silk lawn or fine bolting cloth in order that every particle of impurity in the shape of sand, splinters, or such like may be removed. At this point there follows, in the manufacture of the best tile, an operation which is calculated to remove every particle of metallic iron, each of which would appear as a black speck upon the white surface. The slip or fluid clay is allowed to pass slowly through a trough in which there is placed a battery of powerful electro-magnets. These attract to themselves every morsel of iron and so the slip is cleansed. The next step is the removal of the water which has only been added for the purpose of cleansing the clay. The filter press acts much as does a cider press. The clay is retained in cloth lined chambers and the water, by heavy pressure, is forced out through the pores of the cloth. The clay thus formed is in a plastic state and is available for the manufacture of pottery, but for wall tile it must be dried to a powder. This being done and with sufficient dampness retained or added, the moist dust is fed to heavy presses where in accurately formed steel dies the tile are shaped. Tile thus made are true in form and will remain true when burned. For convenience and economy in filling the kilns the tile are closely packed in cases made of fire clay. These are known to the professional as "saggers" and many hundreds of them of all sizes are found in every well equipped factory. The burning is a severe ordeal. A glowing heat of some 1300 degrees Centigrade is maintained for many hours so that the body of the tile may be thoroughly soaked in the fire. After a slow cooling each tile is dusted from the adhering sand which has been used to fill interstices and is examined for defects. Pieces with chipped corners or untrue lines are rejected and the selected tile are sent to the glazing department to receive a coating of glaze.

The glaze is a complex mixture of fusible ingredients such as lead oxide, lime, feldspar and boric acid mixed with clay and quartz. Some of the component parts are melted together, others are used without preparation but the whole mass is ground in water to a perfectly smooth cream. In this the tile are dipped by hand, one by one, or are coated by being placed in an ingenious machine and they are then ready for a second burning. In this the glaze is fused and becomes firmly fixed to the body of the tile.

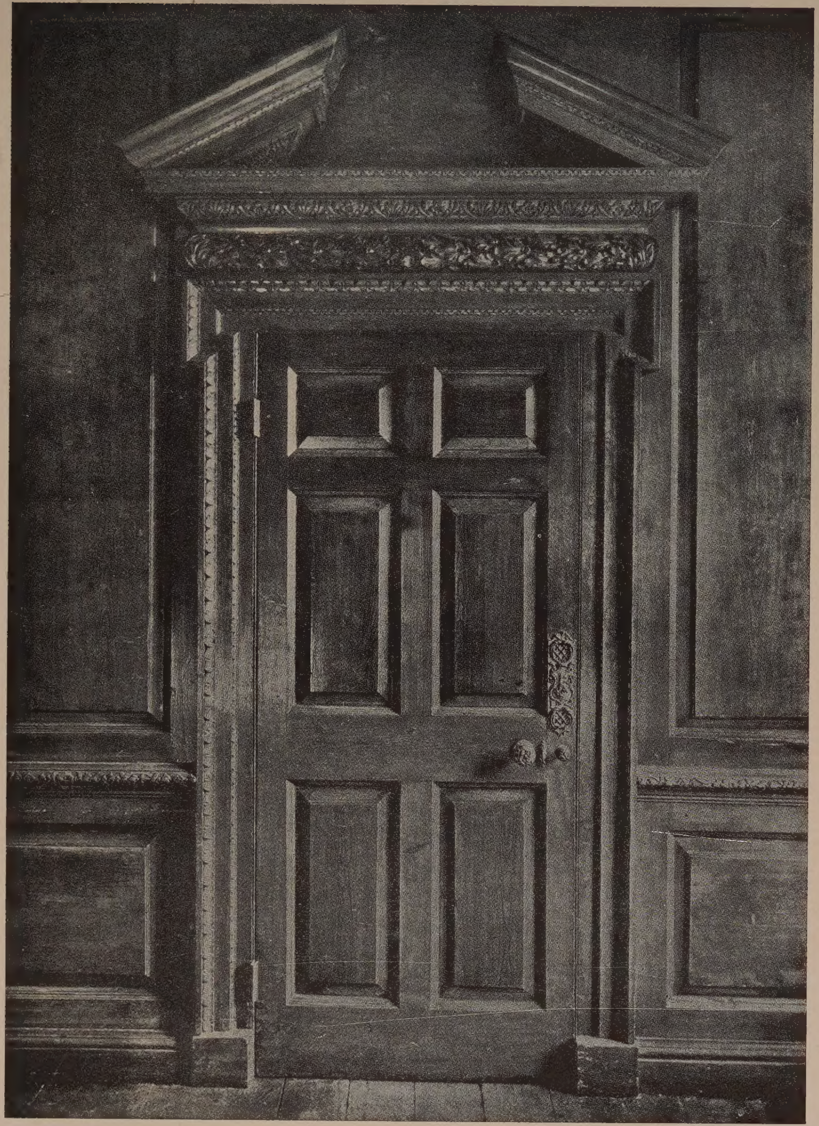
White wall tile are ready for the market when they arrive from the glazing kiln. Tile which owe their coloring to the glaze which has been tinted as required are also finished at this point but if any design or decoration is demanded it may be painted or printed either before or after the glazing fire.

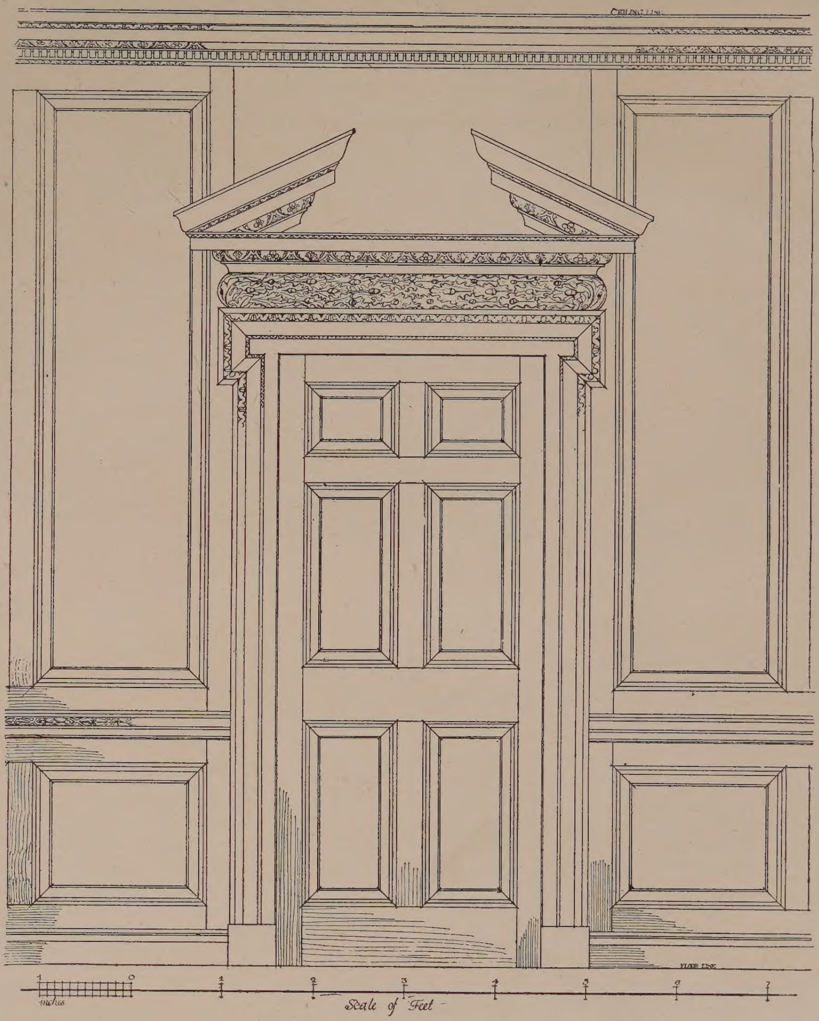
From this brief account of tile in the making it will be seen that quality, as this term is understood in the building professions, must be largely a matter of surface and finish. The actual substance of the tile as expressed in such terms as density, durability and fitness is as uniform as can be made in any series of manufacturing operations. The quality of first or second grading is found in slight irregularities of surface, minute specks or glaze marks and different shades of color or degree of whiteness.





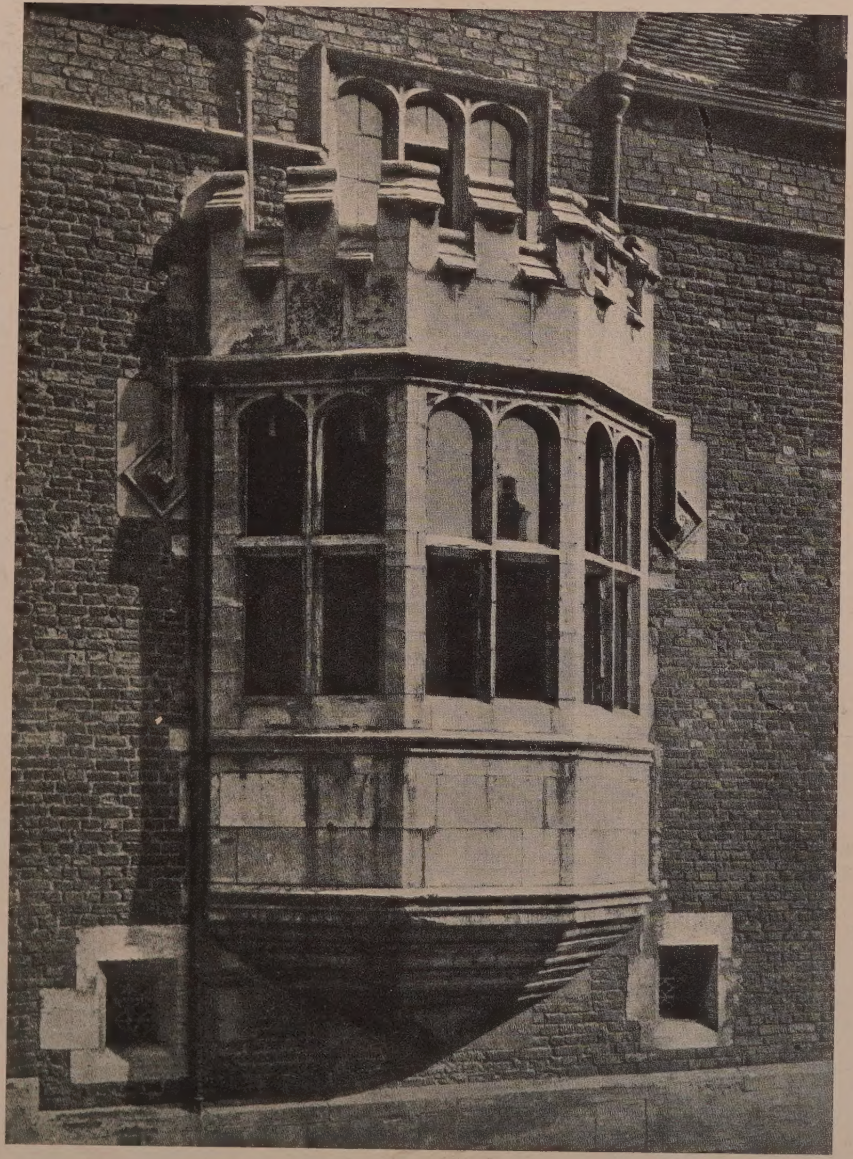
DOORWAY, DINING ROOM, ROWALLAN CASTLE, AYRSHIRE, ENGLAND. Measured and Drawn by J. Steel Maitland,

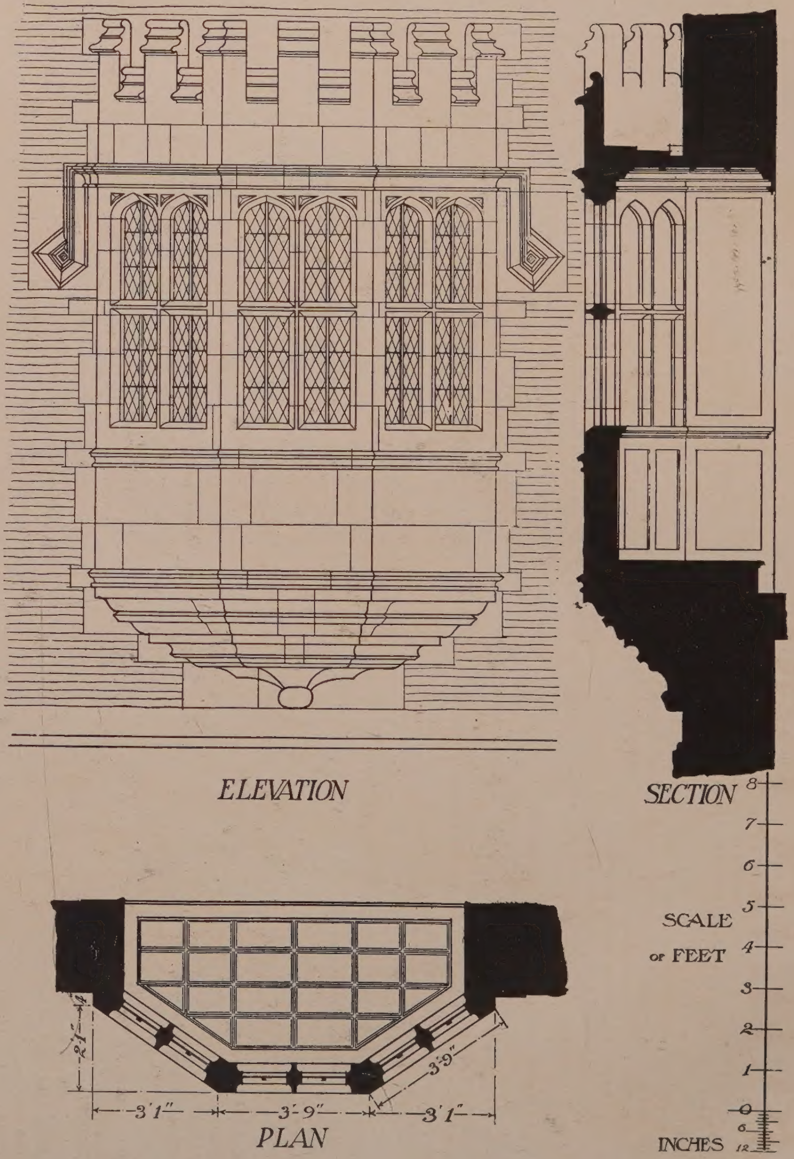




DOORWAY, DINING ROOM, BOURDON HOUSE, LONDON, ENGLAND.

Measured and Drawn by H. A. McQueen.





ORIEL WINDOW, CHANCELLOR'S HOUSE, LINCOLN, ENGLAND.

Measured and Drawn by E. V. West.